U.S. Patent Application No. 10/689,755
Amendment dated May 9, 2007
Reply to Office Action of February 21, 2007

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Original) An image processing apparatus comprising:

an edge window setting unit for an edge window for detecting an edge of a workpiece;

an element setting unit for setting a plurality of window elements in the one edge window set by said edge window setting unit;

an edge detection unit for scanning each of the window elements and obtaining edges every each the window element; and

a calculation unit for obtaining an edge related information from the edges detected by said edge detection unit.

2. (Original) An image processing apparatus as defined in claim 1, wherein said element setting unit sets the plurality of window elements based on a width of the window element which is set by a user.

3. (Original) An image processing apparatus as defined in claim 1, wherein said element setting unit sets the plurality of window elements based on a distance between the adjacent window elements which is set by a user.

4. (Original) A record medium including a program executable on an image processing apparatus, the program comprising instructions having:

a first function of setting an edge window for detecting an edge of a workpiece;

a second function of setting plural window elements in the one edge window set by said

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first function;

a third function of scanning each of the window elements and obtaining edges every each the window element; and

a fourth function of obtaining an edge related information from the edges detected in the third function.

5. (Original) An image processing method comprising:

setting an edge window for detecting an edge of a workpiece;

setting a plurality of window elements in the one edge window set;

scanning each of the window elements and obtaining edges every each the window element; and

obtaining an edge related information from the edges detected.

6. (Original) An image processing method as defined in claim 5, wherein said element setting step includes setting the plurality of window elements based on a width of the window element which is set by a user.

7. (Original) An image processing method as defined in claim 5, wherein said element setting step includes setting the plurality of window elements based on a distance between the adjacent window elements which is set arbitrarily by a user.

8. (New) The image processing apparatus of claim 1, wherein said plurality of window elements has a width and there is a distance between said window elements, wherein said width and said distance are assigned automatically inside said edge window by specifying the number

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of window elements by the user.

9. (New)   The image processing apparatus of claim 1, wherein when said element setting unit sets the plurality of window elements inside said edge window, a setting is performed so that the window elements are always present in one end and the other end of the edge window.

10. (New) ·The image processing method of claim 5, wherein said plurality of window elements has a width and there is a distance between said window elements, wherein said width and said distance are assigned automatically inside said edge window by specifying the number of window elements by the user.

11. (New) The image processing method of claim 5, wherein when said element setting unit sets the plurality of window elements inside said edge window, a setting is performed so that the window elements are always present in one end and the other end of the edge window.

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